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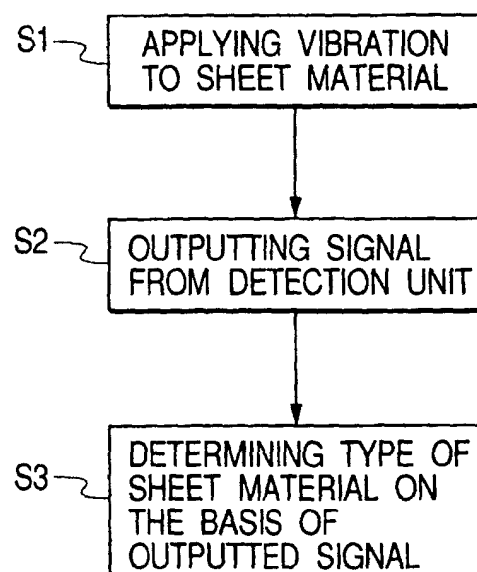
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(54) **Vibration analysis of sheet material**

(57) A signal output apparatus comprises a vibration applying unit that contacts with and applies a vibration to a sheet, and a detection unit that outputs a signal by the vibration. An apparatus for determining a type of a sheet comprises a vibration applying unit that contacts with and applies a vibration to a sheet, and a detection unit that outputs a signal by the vibration, wherein a type of the sheet is determined on the basis of the signal from said detection unit. An image forming apparatus comprises a vibration applying unit that contacts with and applies a vibration to a sheet, and a detection unit that outputs a signal by the vibration.

A method for determining a type of sheet comprises the steps of contacting with and applying vibration to sheet, outputting a signal from a detection unit owing to the contacting and applying step, and determining a type of sheet on the basis of the signal.

FIG. 2





European Patent
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EUROPEAN SEARCH REPORT

Application Number
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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 24 November 2004	Examiner Kouzelis, D
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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